REMARKS

Applicants have carefully considered the matters raised by the Examiner in the outstanding Office Action but remain of the opinion that patentable subject matter is present. Applicants respectfully request reconsideration of the Examiner's position based on the above amendments to the claims, the enclosed Declaration of Mr. Yoshinori Tsubaki and the following remarks.

At the outset, the Examiner will note that the Declaration of Mr. Tsubaki is presently unexecuted. However, the data contained therein originated with the Declarant and is, therefore, entirely reliable. The Declaration has been sent to Mr. Tsubaki for execution and, as soon as the completed document is received, it will be filed in this case. In the meantime, the Examiner is respectfully requested to consider the Declaration in its unexecuted form to expedite prosecution of this Application.

Turning to the amendments made to the claims, claim 1 has been amended to recite the specific compound that is incorporated in the ink absorptive layer. Support for the specific compounds can be found in the Application at page 22, lines 5-10 and page 23, lines 7-9. It will be noted that these compounds are also specifically recited in claims 3 and 4 and, thus, claims 3 and 4 have been cancelled herein. Newly presented claim 10 finds support in the Specification on page 24, lines 9-13. It is deemed that the range

of 0.1 to 5 g/m^2 is supported since the broad range is 0.01 to 5 g/m^2 and the narrow range is 0.1 to 1 g/m^2. Thus, the broad range and the narrow range combined provides support for the range of 0.1 to 5 g/m^2.

One of the novel aspects of the present Invention is the water resistance of the ink jet recording sheet. This aspect of the present Invention is brought out in the Application at page 6, last line. Water resistance is believed to be attributable to the nature of the metal salt which is used as the compound in the present Invention. Specifically, it is deemed that the complex structure of these metal salts holds the dyes after the ink has been applied. In order to emphasize this aspect of the present Invention, Claim 1 has been amended herein to recite the specific preferred metal salts. None of these metal salts are specifically taught or suggested in the applied references. Applicants, however, have gone one step further. They have tested the prior art to show that there is, in fact, a difference between the water resistance of the present Invention and the water resistance of the prior art.

Specifically, the material of Ohbayashi, using the aluminum chloride salt, as taught in Table 2 of Ohbayashi, was tested. The water resistance of Ohbayashi's material was 2.11. Acceptable water resistance, for practical purposes, is 1.5. Thus, Ohbayashi's material is not acceptable for practical use.

In the Office Action, the Examiner had cited Anderson for teaching the use of zirconium nitrate. Thus, a material was prepared in accordance with Anderson by using the material of Ohbayashi and replacing the aluminum chloride of Ohbayashi with the zirconium nitrate of Anderson. This material was tested, Sample 2, and was shown to have a water resistance of 2.04. Again, it can be seen that the water resistance of this material is unacceptable since it is greater than 1.5.

Finally, the material of Shaw-Klein was tested. As noted in Shaw-Klein he specifically teaches the use of calcium chloride in Example 1, see Column 6, line 5. The material of Shaw-Klein was found to have a water resistance of 3.25. Again, this material is greater than the acceptable level of 1.5.

Thus, it can be seen that the material of the prior art of Ohbayashi, the combination of Ohbayashi and Anderson and Shaw-Klein is inferior to the material of the present Invention.

Thus, Applicants have not only amended the claims to distinguish their Invention over the teachings of the references but, also, have tested the materials of the references, as proposed by the Examiner, to show that the material of the present Invention is superior to the material of the prior art.

Turning now to the rejections, claims 1, 2 and 4-9 have been rejected as being unpatentable over Ohbayashi in view of Kawasaki. The Examiner had stated that Ohbayashi teaches the ink jet recording material of the present Invention to include the polyvalent metals salt of aluminum chloride. The Examiner used Kawasaki to teach the pH of the ink jet recording material. Claim 3 had been rejected as being unpatentable over a combination of Ohbayashi, Kawaski and Anderson. Anderson was employed to teach the multivalent metal salt of zirconium nitrate. Finally, claims 1 and 4-6 had been rejected as being unpatentable over a combination of Shaw-Klein and Kawasaki. Here, the Examiner employed Shaw-Klein to teach an ink jet recording material using aluminum chloride as the metal salt. Again, Kawasaki is used for the pH as recicted in the claims.

As noted above, the claims have been amended herein to specifically recite the polyvalent metal salt, which is employed in the present Invention, and it is submitted that the references do not teach, nor suggest, the polyvalent metal salt as recited in amended claim 1. Furthermore, Applicants have tested the materials of Ohbayashi, Ohbayashi in combination with Anderson and Shaw-Klein, as proposed by the Examiner, and have shown that these materials do not contain the water resistance of the present Invention. In fact, Applicants have shown that the water

resistance of these three prior art sheets is not acceptable for practical purposes.

The Examiner will note that, with respect to Shaw-Klein, the metal salt employed in the tests was calcium chloride and not aluminum chloride. The purpose for this was that calcium chloride was specifically used in Example 1 of Shaw-Klein and aluminum chloride had already been shown with respect to Ohbayashi.

Ohbayashi teaches that water soluble polyvalent metal ions can be included, see paragraph 115. He does not specify the specific metal salts which are recited in claim 1. In Table 2, he teaches that aluminum chloride can be employed. As noted in the Declaration, the aluminum chloride recited for sheet 28 had a typographical error in that he used the wrong chemical formula for aluminum chloride. In any event, basic aluminum chloride is not aluminum chloride. (Basic aluminum chloride is aluminum hydroxy chloride).

Anderson, at Column 10, lines 7-25, teaches that inorganic multivalent metal salts can be employed, however, he does not teach the specific ones that are recited in claim 1 as amended herein. As noted above, Applicants did employ the zirconium nitrate, as pointed out by the Examiner, to make an ink jet recording sheet and has shown that using zirconium nitrate in an ink jet recording sheet, produces water resistance which is unacceptable.

With respect to Shaw-Klein, he teaches a plurality of multivalent metal salts, as recited in Column 4, lines 28-35, however, none of the specific multivalent metal salts taught therein are recited in claim 1. Applicants have also shown that the specific teachings of Shaw-Klein, and that of the material of Element 1, has unacceptable water resistance compared to that of the present Invention.

Respectfully, Applicants have not only amended their claim to define over the references but, also, have shown that the references do not have the water resistance of the present Invention and, therefore, are clearly a different material than that of the present Invention.

In view of the foregoing and the enclosed, it is respectfully submitted that the Application is in condition for allowance and such action is respectfully requested. Should any extensions of time or fees be necessary in order to maintain this Application in

pending condition, appropriate requests are hereby made and authorization is given to debit Account # 02-2275.

Respectfully submitted,

MUSERLIAN, LUCAS AND MERCANTI, LLP

By: Donald C. Lucas

Donald C. Lucas
(Attorney for Applicant(s)
600 Third Avenue
New York, New York 10016
Tel. # (212) 661-8000

DCL/mr

Encl: Unexecuted copy of Declaration of Mr. Yoshinori Tsubaki
Return receipt post-card